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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,625	08/08/2000	Jean-Luc Hoffmann	00130	2582

23338 7590 02/20/2003

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EXAMINER

TRAN, LEN

ART UNIT	PAPER NUMBER
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1725

21

DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/582,625

Applicant(s)

HOFFMANN ET AL.

Examiner

Len Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 21-25, 27-34, 36-40, 42-45, and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawada et al (US 5,350,010) in view of DT 24 43 068 A1.

Sawada et al disclose an aluminum strip produced by rolling. The thickness of the strip is 1 to 3 mm (col. 4, lines 35-42) with grain size of less than 20 micron (col. 18, line 37). The aluminum is between 0.1 and 2% silicon and 0.01 to 2% iron (col. 4, lines 39-42), and that magnesium is less than 1.5%, since magnesium is not present.

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Sawada et al fail to teach the strip undergoing a sulphur anodic treatment and having an optical roughness value defined by the ratio $(\text{Max Sn} - \text{Min Sn})/\text{Mean Sn}$ to be less than 20%, and having S_k value of -2 and E_k value less than 15, and a 2D roughness analysis between -0.2 and $+0.3$.

However, DT '068 discloses the upper lip to have a recess reference to the lower lip for the purpose of preventing segregation since it leads to surface streaks after the casted sheet is pickled or anodized. In addition, it is conventional in the art that casting rollers are relatively large, and wherein DT '068 discloses the upper lip to be recessed between 5-10 degrees, would have been more than 2mm.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide the upper lip to be recessed more than 2 mm as taught by DT '068, in order to prevent segregation.

Furthermore, by achieving the above configuration to the injector, recessing the upper lip, one of ordinary skill in the art would have recognized that the end result of producing Sn less than 20 and having S_k value of -2 and E_k value less than 15, and a 2D roughness analysis between -0.2 and $+0.3$, would have been obvious. The burden falls to the applicant to show that any process steps associated with the claimed product result in a materially different product from those of the prior art, because there is nothing in the record before the examiner to reasonably conclude that applicant's product differs in kind from those obtained by the references. See *In re Brown* 173 USPQ 685 and *In re Fessman* 180 USPQ 324.

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4. Claims 26, 35, 41, 46, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Limbach et al (US 5,998,044) in view of DT 24 43 068 A1.

Limbach et al disclose an aluminum strip produced by rolling to obtain a thickness of 4 to 0.1 mm (col. 5, lines 55-60).

Limbach et al fail to teach the strip undergoing a sulphur anodic treatment and having an optical roughness value defined by the ratio $(\text{Max Sn} - \text{Min Sn})/\text{Mean Sn}$ to be less than 20%, and that the Ra value is less than 0.2 micrometer.

However, Limbach et al disclose an Ra value of 0.4microns instead of 0.2 microns. Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have 0.2 microns, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

In addition, the aluminum strip of Limbach et al is capable of achieving the above value, since the Ra and the thickness of the aluminum strip is identical to the claimed invention. Therefore, Limbach et al disclose the aluminum strip as claimed in the claimed invention.

Furthermore, DT '068 discloses the upper lip to have a recess reference to the lower lip for the purpose of preventing segregation since it leads to surface steaks after the casted sheet is pickled or anodized. In addition, it is conventional in the art that casting rollers are relatively large, and wherein DT '068 discloses the upper lip to be recessed between 5-10 degrees, would have been more than 2mm.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide the upper lip to be recessed more than 2 mm as taught by DT '068, in order to prevent segregation.

Hence, achieving the above configuration to the injector, recessing the upper lip, one of ordinary skill in the art would have recognized that the end result of producing Sn less than 20 would have been obvious. The burden falls to the applicant to show that any process steps associated with the claimed product result in a materially different product from those of the prior art, because there is nothing in the record before the examiner to reasonably conclude that applicant's product differs in kind from those obtained by the references. See *In re Brown* 173 USPQ 685 and *In re Fessman* 180 USPQ 324.

Response to Arguments

5. Applicant's arguments with respect to claims 21-36 have been considered but are moot in view of the new ground(s) of rejection.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (703)605-1175. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703)305-3602 for regular communications and (703)305-3602 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Len Tran
Examiner
Art Unit 1725

LT
February 6, 2003



M. ALEXANDRA ELVE
PRIMARY EXAMINER